UNITED STATES DEPARMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE ELSBERRY, MISSOURI

and

MISSOURI DEPARTMENT OF CONSERVATION JEFFERSON CITY, MISSOURI

NOTICE OF RELEASE OF NORTHERN MISSOURI GERMPLASM GRAYHEAD CONEFLOWER SOURCE IDENTIFIED CLASS OF NATURAL GERMPLASM

The Natural Resources Conservation Service (NRCS), U.S. Department of Agriculture, and the Missouri Department of Conservation (MDC) announce the release of a source identified ecotype of Grayhead Coneflower (Ratibida pinnata, Barnh.) for Northern Missouri counties.

As a source identified release, this plant will be referred to as Northern Missouri Germplasm grayhead coneflower to document its original collections. Northern Missouri Germplasm grayhead coneflower is released as a source identified type of certified seed (natural track). It has been assigned the NRCS accession number 9079060.

This alternative release procedure is justified because there are no existing commercial sources of grayhead coneflower collected from numerous native sites throughout this specific region. Propagation material of specific ecotypes is needed for roadside plantings and prairie restoration and enhancement. The potential for immediate use is high.

Collection Site Information: Collections were taken from native prairie remnants within the counties in Missouri north of the Missouri River

Ecotype Description: Grayhead coneflower is a perennial prairie plant. It has a hairy, slender-stem that forms a branching plant and grows to about 4 feet tall. The leaves all alternate and most are divided into 1-4 pairs of narrow lobes, with additional lobe at the tip. Each lobe is widest near the middle, tapers to a narrow base and pointed tip, and may have a few teeth or small side lobes. The basal leaves are on long stalks, with the blade of the leaf up to 7" long. The upper leaves are smaller and often undivided. Flower heads are 3" wide and on long individual stalks. Each head has a brown, bullet-shaped central disk less than 1" tall and usually taller than wide, surrounded by up to 13 downward pointing, yellow, petal-like ray flowers. The plants pollinate using cross-pollination. The seed heads are sharply aromatic when crushed.

Ecological Considerations and Evaluation: Northern Missouri Germplasm grayhead coneflower is a collection of naturally occurring germplasm and has been unaltered. It does not differ in rate or spread, seed production, and vigor from naturally occurring grayhead coneflower. Northern Missouri Germplasm grayhead coneflower did not meet the assessment of a plant that could become invasive based on guidelines adopted by the NRCS Plant Materials Program. It is not expected to behave any differently in the environment than other native plant

material. Northern Missouri Germplasm grayhead coneflower was "okay to release" when evaluated through the "Worksheet for Conducting an Environmental Evaluation of Plant Materials Releases".

Anticipated Conservation Use: Grayhead coneflower can be used in a range seeding, a pasture seeding, prairie restoration, prairie landscaping and wildlife cover and roadside restoration.

Potential Area of Adaptation: Grayhead coneflower occurs in prairies, thickets, borders of woods, and along railroads. Northern Missouri Germplasm grayhead coneflower can be found throughout the counties north of the Missouri River in MLRA's 107-109, 113 and 115. It lies within USDA plant hardiness zones 4b, 5, and 6a.

Availability of Plant Materials: G1 material is being produced in limited supply by the Elsberry Plant Materials Center. For information contact USDA, NRCS, Plant Materials Center, 2803 N. Hwy 79, Elsberry, Missouri 63343 (573 898-2012).

References:

Flora of Missouri; p. 1563; Steyermark, J.A.; Iowa State University Press, Ames, Iowa, 1968.

Tallgrass Prairie Wildflowers – A Falcon Field Guide; p. 145; Ladd, Doug; Falcon Press, Helena and Billings, Montana, 1995.

Flora of the Prairies and Plains of Central North America; p. 838; Dr. Rydberg, P.A.; The New York Botanical Garden, New York, 1932.

Prepared by:

Ron Cordsiemon, USDA NRCS Plant Materials Center, 2903 North Hwy 79, Elsberry, Missouri, 63343.

Signatures for release of:

Northern Missouri Germplasm grayhead coneflower (Ratibida pinnata Barnh.)

Roger A. Hansen State Conservationist United States Department of Agriculture Natural Resources Conservation Service Columbia, Missouri	Date
Lisa Allen (acting) Private Land Services Chief Missouri Department of Conservation Jefferson City, MO	Date
Robert T. Escheman Director, Ecological Sciences Division United States Department of Agriculture Natural Resources Conservation Service Washington, D.C.	Date